

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

All American Pharmaceutical & Natural Foods

Montana Manufacturing Extension Center

Lean Layout, Vision Build Muscle at All American Pharmaceutical

Client Profile:

All American Pharmaceutical and Natural Foods is a full-service contract manufacturer of nutraceuticals and dietary supplements. It provides custom labeling and formulation in liquid, capsule, powder and tablet variations for customers in the industry worldwide. The company employs 65 people at its facility in Billings, Montana.

Situation:

American Pharmaceutical moved to Montana in 1992 and continued to grow, comprising 40,000 square feet of space in several buildings, which created inefficiencies and excess material handling. To improve efficiency, the company's CEO initially set a goal to consolidate operations from several smaller buildings into one 40,000 square foot of space on existing property. He called in the Montana Manufacturing Extension Center (MMEC), a NIST MEP network affiliate, for layout assistance and Lean training.

Solution:

After reviewing the early layout, it became clear that while flow would improve, capacity issues would not be solved. With growth in mind, the team explored enlarging to 60,000 square feet, then 80,000, but realized that would consume most of the available property, hindering any further expansion. A search for available properties in the area continued until the CEO saw in a former retail space the perfect square shell of more than 100,000 square feet to address functionality using Lean and automation. Again the layout was retrofitted to the larger space. The company also wanted zero chance of anything undesirable getting into the food chain and decided on a highly automated, state-of-the-art facility designed to meet drug-level rather than nutraceutical-level specifications. The visionary CEO had anticipated that industry safety guidelines would become a competitive advantage; indeed, they were later mandated in the Bioterrorism Act.

According to an MMEC engineer, unique challenges arise when designing production flow for a pharmaceutical building, with operations in separate rooms, to control air flow and isolate materials. Positioning the laboratories was the toughest step in the layout because they are so integral to every production step: testing and measuring incoming materials, in-process formulations and finally finished goods. In the initial drawings, the labs had been centrally located, but fitting a new layout into an existing structure often requires compromises. Key management attended the MMEC Lean manufacturing workshop to better understand the proposed production flow and its goals. Today, artificial intelligence completely runs the facility from the secured entries to the positive air flow and air exchange. Every room has positive air flow to avoid cross contamination.

Results:

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- * Increased sales by 130 percent.
- * Reduced waste by 40 percent.
- * Anticipated growth of 40 percent.
- * Created new jobs.

Testimonial:

"I see this new facility as a tool for us. The right tools help you improve performance and get better results. I've seen the positive change in sales in just the speed of orders getting out the door. I see it in the attitude of staff. It's exciting and is definitely opening opportunities for us."

Joe Archer, Vice President of Sales and Marketing